

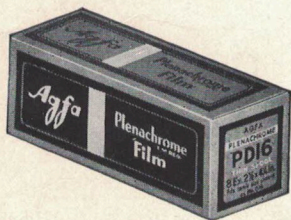
Instructions

FOR THE
USE OF THE
AGFA ANSCO
FOLDING
CAMERA

PD16
PLENAX

WITH HYPAR $f:6.3$
ANASTIGMAT
LENS

FOR FINEST
RESULTS FROM
YOUR PLENAX
CAMERA USE



PD 16 (2½ x 4¼)
AGFA
PLENACHROME
FILM

AGFA FILM IS
GUARANTEED

"Pictures that Satisfy
or a New Roll Free"

Instructions

FOR THE
USE OF THE
PLENAX
CAMERA

THE Agfa Ansco Plenax Camera has been so scientifically designed that exceptionally fine results are easily obtained without special knowledge. All information necessary is contained in this booklet to enable you to secure 100% satisfactory snapshots from your Plenax Camera.

Therefore, before making any exposures with the camera, take the time to carefully read this booklet from cover to cover. Study the illustrations; learn the function of each adjustment. With the camera before you, follow each step of the various operations until the explanation is perfectly clear.

THE AGFA ANSCO PLENAX CAMERA

WITH HYPAR f:6.3 ANASTIGMAT LENS

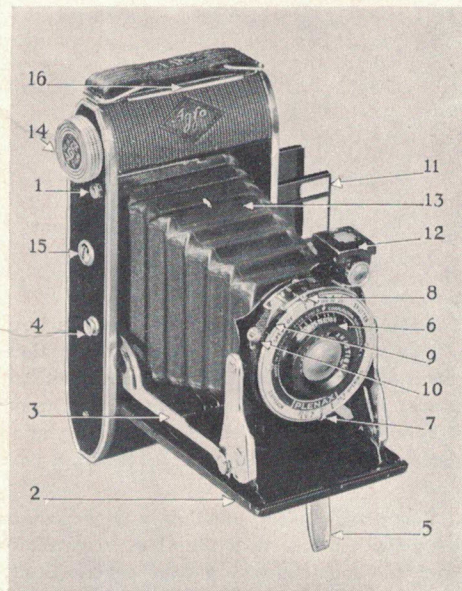


Fig. 1

Explanation of numbers on opposite page.

CHECK OVER THE CAMERA WITH

FIG. 1 BEFORE YOU

1. Opening release button. Press in to open camera.
2. Platform. Pull down after releasing catch (1) until side-arm braces (3) lock.
3. Side-arm braces. See that braces lock and hold platform rigid.
4. Closing release button. Similar button is on opposite side of camera. With the camera held between the thumb and middle finger of the left hand, press the release buttons on both sides simultaneously. With the right hand, move platform upward until securely closed as indicated by clicking of latch.
5. Vertical footrest.
6. Focusing scale for various distances.
7. Diaphragm adjustment lever for controlling amount of light entering lens.
8. Shutter adjustment lever for varying shutter speeds.
9. Finger release for operating shutter. Press downward to make exposure.
10. Socket for addition of cable release for operating shutter. A cable release for this camera is available if desired.
11. Direct View Finder, for full-size or half-size pictures.
12. Brilliant finder. Turn for horizontal pictures. Return to vertical position before closing camera. Swing mask marked "15" upward to obtain range of view for full-sized pictures.
13. Bellows.
14. Winding knob for advancing film.
15. Tripod sockets (only one shown—other on front of platform). Remove screws to insert threaded screw on tripod head.
16. Release catch for opening back.

TO OPEN THE CAMERA

To open the camera, hold it in the palm of the left hand and press the opening release button (1, Fig. 1) with the left thumb. With the right hand, pull down the platform (2) until the side-arm braces are locked firmly in place.

TO CLOSE THE CAMERA

Be certain, first, that the half-size mask on the brilliant finder (12) is down and that the finder is in a vertical position.

To close the camera, grasp it in the palm of the left hand and simultaneously press the two closing release buttons (4) with the thumb and middle finger. With the right hand then move the platform upward until it is securely closed as indicated by a clicking of the latch.

Repeat the operation of opening and closing the camera until you can do it easily and deftly. Never force the camera at any point. If any obstruction is encountered, stop at once and determine what is in the way.

FOCUSING

The focusing scale will be found on the top outer edge of the lens barrel, and will be identified by the series of figures running from 5 to Infinity. See illustration of lens mounting, Fig. 2. If the object to be photographed is 10 feet away, revolve the lens barrel until the figure 10 is opposite the indicating arrow between the words "AnSCO" and "Corporation" on the circular plate above. Distances from the lens to all objects from 5 to 50 feet should be estimated as accurately as possible and set on the barrel. For subjects at a distance of 100 feet or greater, the barrel should be set at INF, or Infinity.

To use as a fixed focus camera, set the lens barrel at 15 feet, and set all indices on the figures in red. Thus everything from 9 to 45 ft. will be in focus. Sharper pictures will result, however, if the lens is focused according to the index.

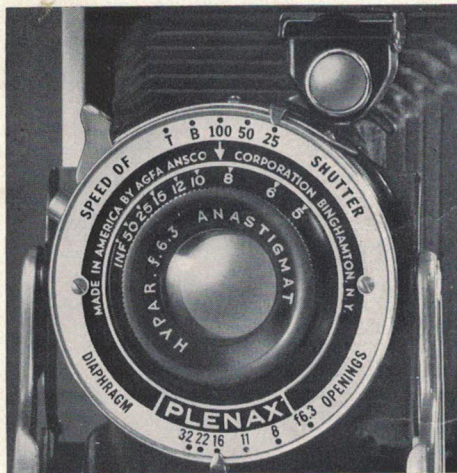


Fig. 2
Lens Mounting

THE SHUTTER

The shutter is the mechanism which actually makes the exposure when taking a picture. Simply expressed, it does nothing more than uncover the lens for a very short period of time so that light from the object photographed may pass through the lens and project an image upon the film. However, it does this uncovering job with a very high degree of accuracy and with a suitable range in speed. Thus the portion of light admitted through the lens may be a very small one, such as that

when the shutter is operated at one hundredth of a second, or a larger portion such as that when the shutter is operated at a twenty-fifth of a second.

TO REGULATE THE SHUTTER SPEED

Along the top of the lens mounting (Fig. 2, page 7) is a row of figures and letters—T, B, 100, 50 and 25. T means time, B means Bulb, and 100, 50 and 25 indicate $1/100$, $1/50$ and $1/25$ second respectively.

To set the shutter for any of these speeds, move the pointer (8, Fig. 1) to a position directly over the desired figure. In the shutter illustration, Fig. 2, the shutter is set for $1/25$ second, the standard snapshot speed, and shown in red on the dial.

In addition to these figures on the front plate of the shutter, identically corresponding figures will be found on the top of the shutter as an aid in changing the settings without moving the camera from the waist-level position when focused on a subject.

The shutter is operated, or "tripped," by the finger release (9, Fig. 1) or by a cable release if such has been added. Care must be taken when the release is pressed down in making an exposure not to jar or move the camera. If the camera is moved, a blurred picture will result. Holding the opened camera in the palm of the left hand, its back held firmly against the body for support, practice the shutter operation until you are certain exposures can be made without moving the camera.

When the shutter is set for $1/25$, $1/50$ or $1/100$ second, a single pressure on the release lever trips the shutter, opening and closing it. When the shutter is set for B or Bulb (a term

surviving from the days when the shutter was operated by a rubber bulb), it stays open as long as the lever remains depressed, and closes as soon as the pressure is released. Bulb is used for comparatively short time exposures, as for example, when light conditions do not permit the use of an instantaneous exposure. Since it is impossible to hold the camera perfectly still in the hand for any length of time, the instrument must be used on a tripod or other firm support when Bulb exposures are made. This is true of all exposures longer than $1/25$ second.

When the shutter is set for T or Time, one downward pressure opens the shutter, following which a second pressure is necessary to close it. In other words, the lens remains open the full time, however long, between the two operations of the lever. T is used for interior work and longer time exposures, such as may be counted with the second hand of a watch. Bulb or Time exposures should never be made of moving objects. The addition of a cable release is especially valuable for time exposures to prevent danger of moving the camera.

THE DIAPHRAGM

The diaphragm is an adjustable circular opening within the elements of the lens which controls the amount of light passing through the lens. When the diaphragm is adjusted so that the full aperture of the lens is utilized, it is said to be "wide open." When the diaphragm is adjusted to its smallest opening, it is said to be "stopped down."

This diaphragm is operated by means of the lever, (7, Fig. 1), also shown on Fig. 2 set under the numeral 16. This lever is connected with a pointer on the opposite side of

the shutter which moves along a similar row of figures on the flange at the top of the shutter. Thus, the diaphragm setting may also be read from above while holding the camera at waist level.

In order to view the operation of this diaphragm, set the shutter speed on Time and press down once on the finger release. Then, with the shutter open, move the diaphragm lever at the bottom of the shutter back and forth slowly, and you will be able to observe the change in the size of the opening as the lever moves.

The stops or settings indicated along the bottom of the shutter face plate and along the top flange are standard openings in the Focal or "f System," and are of known exposure value regardless of the size or make of camera. They are referred to as f:6.3, f:8, f:11, f:16, f:22, f:32.

PROPER EXPOSURE

In Fig. 2 the stop indicator is set for opening f:16. With speed 1/25 second this is the standard stop for average sunshine. For twice as much exposure at the same speed, move the pointer to f:11, and for twice as much again, move it to f:8. In other words, the lower the number, the larger the opening, and of course, the larger openings let through more light, giving greater exposure within the same shutter speed.

Proper exposure of your negatives depends on several factors; the time of day; whether the sun is shining or the sky is dull or cloudy, and whether the subject to be photographed is bright, such as an open landscape, or quite dark, such as a view in shaded woods.

In general, close-ups require a greater exposure than distant scenes; winter conditions necessitate longer exposures than bright sum-

mer days. Pictures taken with extremely intense light such as sunlit beaches and brilliant snow scenes will require less exposure than normal. However, the following table will offer a general guide on which you will be able to base the proper setting of your shutter when using Agfa Plenachrome roll film.

EXPOSURE TABLE

STOP	f:6.3	f:8	f:11	f:16	f:22
Dull, cloudy	1/100	1/50	1/25	*	*
Cloudy bright		1/100	1/50	1/25	*
Bright sunshine			1/100	1/50	1/25
Intense sunshine				1/100	1/50

* Under these light conditions it is recommended that short Bulb exposures be made.

Fig. 3

Greater detail will result in your negatives when a smaller diaphragm opening is used. With the camera focused at Infinity and the diaphragm set at f:8, everything from 31 feet to Infinity will be sharp and in focus. When the camera is focused at Infinity and the diaphragm set at f:16, everything from 19 feet to Infinity will be in focus. Thus it is seen that the depth of focus, or the range of distance over which the picture is sharp and in focus has been increased by reducing the opening of the diaphragm. For your convenience a table of focal-depths at various diaphragm settings appears on next page.

DEPTH-OF-FOCUS TABLE

for PD-16 Camera with Hypar f:6.3 lens

Distance in ft.	f:6.3	f:8	f:11	f:16
Inf.	36 -Inf.	31 -Inf.	24½ -Inf.	18½ -Inf.
50	26½ -Inf.	23½ -Inf.	20 -Inf.	15½ -Inf.
25	17½-44½	16 -56	14 -Inf.	12 -Inf.
15	11½-20	11 -22½	10 -27½	9 -45
12	10 -15	9½-16½	9 -19	8 -26
10	8½-12	8 -13	7½-14½	7 -18
8	7 - 9½	6½-10	6½-10½	6 -12½
6	5½- 6½	5 - 7	5 -7½	4½- 8
5	4½- 5½	4½- 5½	4½- 6	4 - 6½

THE FINDERS

The Plenax Hypar camera is equipped with both the brilliant finder for locating the subject with the camera held at waist level, and the direct view finder for holding the camera directly to the eye.

The brilliant finder requires little explanation. When making 15 exposures to the roll it is used with the small mask marked 15 down. *When full-size exposures are being made, the mask must be raised upward and to the front in order to utilize the entire finder.*

When making full-size exposures in the vertical position, read the finder as shown in Fig. 4, and when taking pictures in the horizontal position, swing the finder 90 degrees to the left and read it as shown in Fig. 5, disregarding the portions indicated in the cuts by white space.



Fig. 4



Fig. 5

Always remember to lower the mask and return the finder to the vertical position before closing the camera. Otherwise, they will become jammed and possibly thrown out of alignment.

The direct view finder, (11, Fig. 1), located on the side of the camera, may also be used for both full-size and half-size pictures. It is of special value for spotting the subject quickly when taking pictures in crowds or where an obstacle prevents holding the camera at waist level.

To open this finder, place the nail of the forefinger of the left hand in the slot on the front edge of the finder and pull backward. The front and rear elements will spring naturally into place. Grasped at the base with the left hand, the camera is then held before the left eye.

If taking a full-size picture, the view seen with the entire outline of the front sight will be included in the film. When half-size pictures are taken, only that portion within the center bars will be included. To close the direct view finder, swing the front element back against the side of the camera, and then

close the rear element over it until it clicks into place.

Incidentally, regarding both of these finders, it must be understood that in the exposure of half-size pictures, when the camera is in the vertical position, horizontal half-size pictures are taken, and vice versa. This point will be better understood when the mask for reducing the film size is described at a later point.

THE FOOTREST AND TRIPOD SOCKETS

The vertical footrest (5, Fig. 1) is for taking Time or Bulb exposures when a tripod is not available. The footrest is easily extended by pulling it out at right angles to the platform, after which the camera may be set upon a table, ledge, or railing for support.

In order to use the tripod sockets (15, Fig. 1) it is necessary to first remove the plug-screws. This may be done with a small coin, after which the tripod is screwed securely into place. The screws should be replaced after removal of the tripod in order to protect the interior of the camera against dust or other foreign matter which might prove injurious to the shutter mechanism.

The vertical tripod socket is located in the center of the camera platform; the horizontal socket is on the camera side plate below the film winding knob.

The vertical footrest or a tripod should always be used for exposures longer than $1/25$ second rather than attempting to hold the camera in the hands.

LOADING THE CAMERA

To load the camera, it is first necessary to

open the back which is held by a catch (16, Fig. 1) at the top under the handle.

In order to release this catch, hold the camera in the left hand, platform side in and handle to the top. Then lay the fingers of the right hand across the camera handle and exert an upward pressure upon the under front edge of the long metal catch (Fig. 6). When this catch has been released, continue with a backward pressure to swing the hinged camera back downward.

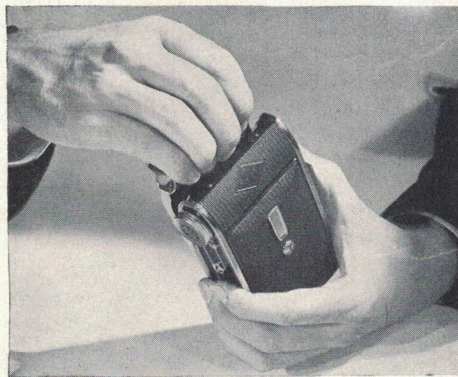


Fig. 6

Repeat the operations of opening and closing the back until you can operate the catch easily and deftly.

THE MASK FOR HALF-SIZE PICTURES

Before loading the camera it is essential for you to determine the size of pictures desired for the particular roll being loaded. You have the choice with the same roll of film, between

loading the camera for 8 full-size pictures or for 15 half-size pictures.

Upon opening the camera back for the first time you will notice a black rectangular frame (1, Fig. 7) between the film rollers (2, Fig. 7). This frame or mask determines the size of the exposure made on the film. When it is in place, the picture size is reduced by half, and 15 exposures to the roll are obtained. When the frame is lifted out and entirely removed from the camera, 8 full-size exposures are obtained from one roll.

Due to the fact that the film is stretched on top of this mask, decision as to the picture size should be made before the camera is loaded, for it is necessary to continue this size picture until after the roll has been fully exposed.

Upon the removal of the mask for full-size pictures, care should be taken to place the metal frame where it will not become lost or bent. However, a new mask can always be bought from your dealer.

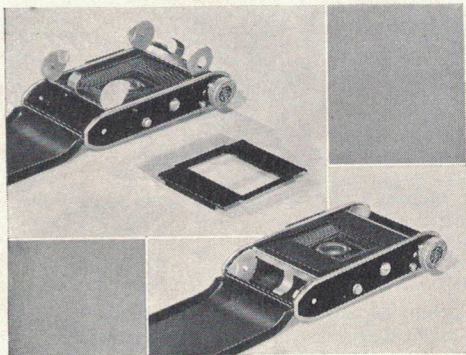


Fig. 7

INSERTING THE FILM

With the back open you are now ready to load the camera with film. Note that the fresh roll goes into the lower chamber at the opposite end of the camera from the winding knob. In the chamber at the knob end, you will find an empty metal spool. It is onto this spool that the film is wound as used, so that when all exposures are taken it is this top spool which is removed from the camera for finishing.

It should be remarked at this point that the small, compact size of your Plenax Camera requires film wound on the new small metal spool, designated by the Agfa Ansco Corporation as PDI6. Be sure to ask for the thin metal spool, as this camera will not accommodate film wound on the ordinary larger wooden film spool.

To load the film into the camera, first swing up the spool carrier for the lower or empty chamber until it is at right angles to the camera. Holding the two ends of this carrier slightly apart (being careful not to bend them permanently out of position), drop the fresh spool into place, taking care that it is inserted right end around. In other words, be certain that the pointed end of the paper will come from the top and not the bottom of the roll, and that only the red or green side of the paper will show, the black side being toward the lens.

After being certain that the two pins set in the carrier ends are engaged in the spool end-holes, swing the carrier and film down into place in the chamber. Break the sticker which seals the roll, remove the Agfa Film guarantee slip, and carry the end of the paper across the back of the camera, and across the black metal mask if it is being used. Permit

the paper to pass over the two metal rollers (never attempt to thread the film under these rollers) and thread the pointed end into the slot in the empty spool as shown in Fig. 8.



Fig. 8

Be very certain that the paper is centered on the upper spool in order that it will wind evenly. Now give the winding knob a few turns, sufficient to bind the paper and assure its firm grasp by the upper spool. Close the back of the camera by swinging it upward into place until a click indicates that it is locked securely. Never open the back of the camera from this point until the roll has been completely exposed.

Swing open the No. 1 Peephole cover (Fig. 9), and continue turning the winding knob slowly until the figure 1 appears in this lower peephole. An indicating hand and row of dots will be seen shortly before this first figure

appears in place. The camera is now ready for the first picture.

When using panchromatic film, which is sensitive to red light, be sure to keep the red windows covered at all times except when winding the film.

If eight full-size exposures are being taken and the masking frame has been entirely removed from the camera, only the No. 1 or lower peephole is used throughout. In which case, immediately after taking the first picture, wind again until figure 2 appears in the lower peephole, and so on until the roll has been completely exposed, after which continue to turn the knob until the red or green paper is completely wound off onto the spool at the knob end of the camera.

Where fifteen half-size exposures are desired and the masking frame has been left in the camera, both the No. 1 and No. 2 peepholes are used. The first exposure is made with the figure 1 at the lower window. After a picture has been made with the film in this position, the winding knob is then turned very slowly (only about one full turn of the knob is necessary) until the figure 1 appears at the upper or No. 2 peephole. For the third exposure the figure 2 is at the lower window, for the fourth it is moved to the upper, and so on until all fifteen exposures have been made. In other words, one exposure is made with each of the eight numbers at each window.

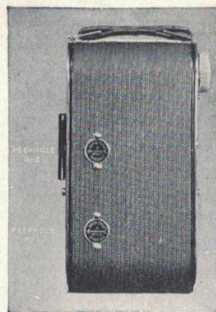


Fig. 9

UNLOADING

When the film has been completely wound onto the knob spool, open and swing down the back of the camera. Pull out the winding knob until the upper spool carrier is free to be moved upward from the chamber.

Fold under the pointed end of the red or green paper, and seal the spool with the sticker which will be found at the loose end. This is to prevent unrolling and fogging of the film after it has been removed from the spool carrier.

With the fingers, separate the ends of the spool carrier slightly and remove the exposed roll from the camera. It is now ready to be developed and printed. Transfer the empty spool to the upper chamber, remembering to push the winding knob back into place. The camera is now ready for the insertion of a fresh roll of film in the manner already described.

CAUTIONS

Your Plenax Camera may be loaded or unloaded in daylight. However, these operations should be done in a subdued light; never in direct sunlight.

Before loading the camera, make certain that the shutter is closed.

In starting the red or green paper at the time of loading a fresh roll, always see that it is even, fitting the spool neatly. Otherwise, it is likely to climb up one end of the spool, causing the protective paper to tear and possibly fogging the film.

Also, always make it a practice to wind to the next number immediately after taking a picture. In this way, when you start to use it, the camera is always ready for the next picture with no possibility that another exposure will be made on top of one already taken, thus spoiling both exposures.

In making exposures, always hold the camera level. Otherwise, your finished prints will show an undesirable slanting of the subject and background. Hold the camera perfectly still when making the exposure.

Keep the lens of your Plenax Camera clean. A dirty lens or rain or mist on the front lens will cause fogged or cloudy pictures. To clean the lens, use a soft linen or cotton cloth. With the bellows closed, back opened, and the camera unloaded, it is also well to occasionally clean the rear element of the lens.

Do not let the sun shine directly on the lens when taking a picture. This produces a "Flare" of light on the film which shows in the finished picture. If photographing towards the source of light, hold your hand or hat above the lens as a shade, but sufficiently high to prevent its being included in the picture.

Select your background carefully. A good subject can be spoiled by such backgrounds as telephone poles, clapboard houses, etc. Keep your backgrounds simple. A background of foliage is usually unobtrusive and pleasing.

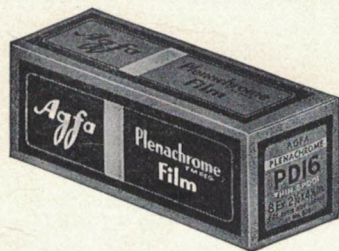
* * *

The foregoing instructions explain the mechanical operation of your Plenax Camera. These should be thoroughly understood before attempting to take pictures.

Do not be content, however, with the mastery of these simple details. Photography offers marvelous possibilities to the camera user who really attempts to obtain the maximum results possible with his equipment. Your Plenax Camera is a fine instrument. Learn to use it most effectively.

Portrait attachments, color filters, and cable releases which are available for Plenax cameras greatly increase their versatility.

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